PATENT
Customer No. 22,852
Attorney Docket No.: 6890-11-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Kang Tae Lee et al.
Serial No. : 09/927,338
Filed : August 13, 2001
For : Skin Cosmetic Composition Containing Kidney Bean Extracts
Group Art Unit : 1616
Examiner : K. George

DECLARATION UNDER 37 C.F.R SECTION 1.132

Hornerable Commisioner of
Patent and Trademarks
Washington, D.C.20231

I, Kang Tae LEE, citizen of Republic of Korea and residing at 102-704, Hando APT. SameunRi, JiksanKun, CheonanSi, ChungCheongNamDo, Korea, hereby declare as follows:

I am one of the co-inventors of the subject matter of the above-identified application.

2. My personal particulars are summarized as follows:

[Work Experience]

1987-1994 : Major in Microbiology at Chungnam National University
Degree : Bachelor of Science
1994-1996 : Major in Microbiology at Chungnam National University
Degree : Master of Science
M. S. thesis : Biosynthesis and characterization of poly-β -hydroxyalkanoates synthesized by *Bacillus thuringiensis* R-510

[Employment]

(1996～Present) : Researcher at Skin Biology Team, R&D Center, Coreana Cosmetics.

[Journal Publication]

Brazilin as a new sunless tanning agent. K.T. Lee and J.H. Kim
Proceeding of ASCS(Asian Societies of Cosmetics Scientists), May, 24, 1997.

Biological screening of 100 plant extracts for cosmetic use(I) : Inhibitory activities of tyrosinase and DOPA auto-oxidation. K.T. Lee, B.J. Kim and J.H. Kim, *International Journal of Cosmetic Science* 19, 291-298(1997).

Brazilin as a new sunless tanning agent. K.T. Lee and J.H. Kim, *International Journal of Cosmetic Science* Accepted at 1998.

Inhibitory effects of ramulus mori extracts on melanogenesis. J. H. Kim and K.T. Lee, *Cosmetics and Toiletries*, in press, October. 1998.

Biological screening of 150 plant extracts for cosmetic use(III) : Development of sun-screen agent from natural plants. K.T. Lee and J.H. Kim, Submission at *International Journal of Cosmetic Science* 1998.

[Presentation]

ASCS(May 24, 1997, Taiwan)
-Brazilin as a new sunless tanning agents.
IFSCC(September 16, 1998, France)
-Preliminary studies on natural plant extracts as sunscreen agent.
-Inhibitory effects of ramulus mori extracts on melanogenesis.

[Patent Application] **9 cases (KP: 5, USP: 3, JP: 2 and EP:1)**

Nation	Title	Application No.
KP (Korean patent)	Whitening cosmetics containing ramulus mori extracts	97-47261
	Whitening cosmetics containing solvent-fractionated extracts of ramulus mori extracts	97-47259
	Whitening cosmetics containing mulberrin	97-47260
	Tanning cosmetics containing *Caesalpinia sappan* L. extracts	97-30755
	Tanning cosmetics containing brazilin	97-4914

JP (Japan Patent)	Whitening cosmetics containing ramulus mori extracts	97-354507
	Whitening cosmetics containing mulberrin	97-354508
USP (United States Patent)	Whitening cosmetics containing solvent-fractionated extracts of ramulus mori extracts	08/988840
	Whitening cosmetics containing mulberrin	08/987149
	Tanning cosmetics containing *Caesalpinia sappan* L. extracts	08/900883
EP (Europe Patent)	Tanning cosmetics containing *Caesalpinia sappan* L. extracts	97305561.9

3. I am thoroughly familiar with the Office Action dated July 31, 2001, wherein the Examiner has rejected claims 5-10 of the present application under 35 U. S. C. 102(b) as being anticipated by Miyamoto et al. (JP Pat. Application No. 63-66109).

A. Comparison with Miyamoto et al. (JP Pat. Application No. 63-66109): Comparative Experiments for Kidney Bean Extract vs. Kidney Bean Pod Extract and for Kidney Bean Extract vs. Tramatic acid

A-1. TLC analysis

The method for obtaining kidney bean extract and kidney bean pod extract was identical with that in Example 8 of the present invention. Dry weight of kidney bean extract and kidney bean pod extract was 127.4g and 135.2g, respectively, and extraction yield was 12.7% and 13.5%, respectively.

Each of said extracts was dissolved in purified water. NaCl and then ethyl acetate were added thereto, subjected to sufficient stirring and the ethyl acetate layer was taken. This was subjected to TLC on mobile phase of CH_2Cl_2: MeOH= 10:1, and spots were identified with 5% sulfuric acid solution.

- For Tramatic acid described as the main component in JP Pat. Application No. 63-66109, TLC analysis was conducted on identical mobile phase by dissolving in ethyl acetate, and spots were located.

As the result, spots with the following R_f values were identified, and based on this it could be confirmed that a difference does exist in components between the kidney bean extract and kidney bean pod extract.

R_f values for kidney bean extract: 2.4/3.3 = 0.73
2.1/3.3 = 0.64
1.9/3.3 = 0.58
1.8/3.3 = 0.55

R_f value for kidney bean pod extract: 2.4/3.3 = 0.73

R_f value for Tramatic acid : 2.4/3.3 = 0.73

Because the kidney bean extract was prepared without the pod, the results mean that the kidney bean extract has more at least three components than the pod extract. That is, the said two extract have different composition with each other. Also, on base of the result that the first R_f value of the kidney bean extract is the same as that of the pod extract and that of Tramatic acid, we may guess that the component of the first R_f value of the kidney bean extract is the same with that of the pod extract and the component is Tramatic acid.

A-2. Experiment for collagen synthesis (type I collagen biosynthesis) effect

Same test samples as used in said experiment A-1 were used by dissolving in 1,3-butylene glycol to 1% concentration and the testing method was identical with Experimental Example 2 of the present invention.

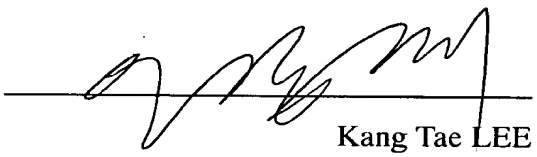
The result is given in the following Table.

Sample Conc. (μg/ml)	Collagen Synthesis (ng/2 X 10^4 cells)		
	Kidney bean extract	Kidney bean pod extract	Tramatic acid

Control	151	150	150
100	204	152	165
250	251	155	175

The above result confirms that the kidney bean extract of the present invention clearly differs from kidney bean pod extract or Tramatic acid of JP Pat. Application No. 63-66109, in the view of its effect as well as the components.

ated: October 8, 2003



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